AMENDMENTS TO THE CLAIMS

1. (Canceled).

2. (Currently Amended) The process according to claim 11 [[1]], wherein said moiety having at least pH-indicating whitening, fluorescent, phosphorescent, X-ray phosphor, or polymeric intrinsically conductive properties is an intrinsically conductive polymer.

3. (Currently Amended) The process according to claim 4 [[2]], wherein said intrinsically conductive polymer is selected from the group consisting of polyanilines, polyaniline derivatives, polypyrroles, polypyrrole derivatives, polythiophenes and polythiophene derivatives.

4. (Currently Amended) A [[The]] process ~~according to claim 2, wherein said intrinsically conductive polymer~~ for the offset printing of a receiving medium with a functional pattern comprising in any order the steps of: applying a printing ink to a printing plate and wetting said printing plate with a fountain comprising a fountain medium comprising between 50% by weight and 100% by weight of water thereby providing said printing plate with an area inked with said printing ink and an area coated with said fountain, and transferring said printing ink and fountain onto said receiving medium, wherein said fountain further comprises as a solution or a dispersion in said fountain medium at least one moiety having at least pH-indicating, whitening, fluorescent, phosphorescent, X-ray phosphor or polymeric intrinsically conductive properties, wherein said moiety having at least pH-indicating, whitening, fluorescent, phosphorescent, X-ray phosphor or polymeric intrinsically conductive properties is a polymer or copolymer of a 3,4-dialkoxythiophene in which the two alkoxy groups may be the same or different or together represent an optionally substituted oxy-alkylene-oxy bridge, a functional pattern of said at least one moiety is provided on said receiving medium, and a pH-indicator pattern is provided when said fountain comprises at least one moiety having at least pH-indicating properties.

5. (Currently Amended) The process according to claim 4 [[2]], wherein said intrinsically conductive polymer is selected from the group consisting of: homopolymers of (3,4-methylenedioxy-thiophene), (3,4-methylenedioxythiophene) derivatives, (3,4-ethylenedioxythiophene), (3,4-ethylenedioxythiophene) derivatives, (3,4-

propylenedioxythiophene), (3,4-(propylenedioxythiophene) derivatives, (3,4-butylenedioxythiophene) and (3,4-butylenedioxythiophene) derivatives and copolymers thereof.

6. (Currently Amended) The process according to claim 4 [[1]], wherein said aqueous fountain medium further comprises a polyanion.

7. (Previously Presented) The process according to claim 6, wherein said polyanion is poly(styrenesulfonate).

8. (Currently Amended) The process according to claim 4 [[1]], wherein said aqueous fountain medium further comprises a di- or polyhydroxy- and/or carboxy groups or amide or lactam group containing organic compound.

9. (Previously Presented) The process according to claim 8, wherein said di- or polyhydroxy- and/or carboxy groups or amide or lactam group containing organic compound is selected from the group consisting of 1,2-propandiol, propylene glycol, diethylene glycol, N-methyl pyrrolidinone and di(ethylene glycol)ethyl ether acetate.

10. (Previously Presented) The process according to claim 8, wherein said process further comprises heating said receiving medium within 10 minutes after printing to a temperature of 100°C to 250°C.

11. (Currently Amended) A [[The]] process ~~according to claim 1,~~ for the offset printing of a receiving medium with a functional pattern comprising in any order the steps of: applying a printing ink to a printing plate and wetting said printing plate with a fountain comprising a fountain medium comprising between 50% by weight and 100% by weight of water thereby providing said printing plate with an area inked with said printing ink and an area coated with said fountain, and transferring said printing ink and fountain onto said receiving medium, wherein said fountain further comprises as a solution or a dispersion in said fountain medium at least one moiety having at least pH-indicating, whitening, fluorescent, phosphorescent, X-ray phosphor or polymeric intrinsically conductive properties, wherein a functional pattern of said at least one moiety is provided on said receiving medium, and wherein a pH-indicator pattern is provided when said fountain comprises at least one

moiety having at least pH-indicating properties, and wherein said aqueous fountain medium further contains an aprotic organic compound with a dielectric constant ≥ 15.

12. (Previously Presented) The process according to claim 11, wherein said process further comprises heating said receiving medium within 10 minutes after printing to a temperature of ≤ 150°C.

13. (Currently Amended) The process according to claim 4 [[1]], wherein said fountain further comprises a non-ionic or anionic surfactant.

14. (Currently Amended) The process according to claim 4 [[1]], wherein said fountain has a viscosity at 25°C after stirring to constant viscosity of 30 mPa.s as measured according to DIN 53211.

Claims 15-18. (Canceled).

19. (Currently Amended) The process according to claim 27 [[18]], wherein said intrinsically conductive polymer is selected from the group consisting of polyanilines, polyaniline derivatives, polypyrroles, polypyrrole derivatives, polythiophenes and polythiophene derivatives.

20. (Currently Amended) A [[The]] process ~~according to claim 18~~ for the offset printing of a receiving medium with a functional pattern comprising in any order the steps of: applying a printing ink to a printing plate and wetting said printing plate with a fountain comprising a fountain medium comprising between 50% by weight and 100% by weight of water, said fountain further comprising as a solution or a dispersion in said fountain medium at least one moiety having at least pH-indicating, whitening, fluorescent, phosphorescent, X-ray phosphor, organic conductive or organo-metallic conductive properties, wherein said moiety having at least pH-indicating, whitening, fluorescent, phosphorescent, X-ray phosphor, or organic conductive or organo-metallic conductive properties is an intrinsically conductive polymer, wherein said intrinsically conductive polymer is a polymer or copolymer of a 3,4-dialkoxythiophene in which the two alkoxy groups may be the same or different or together represent an optionally substituted oxy-alkylene-oxy bridge.

21. (Currently Amended) The process according to claim 20 [[18]], wherein said intrinsically conductive polymer is selected from the group consisting of: homopolymers of (3,4-methylenedioxy-thiophene), (3,4-methylenedioxythiophene) derivatives, (3,4-ethylenedioxy-thiophene), (3,4-ethylenedioxythiophene) derivatives, (3,4-propylenedioxythiophene), (3,4-(propylenedioxythiophene) derivatives, (3,4-butylenedioxythiophene) and (3,4-butylene-dioxythiophene) derivatives and copolymers thereof.

22. (Currently Amended) The process according to claim 20 [[17]], wherein said aqueous fountain medium further comprises a polyanion.

23. (Previously Presented) The process according to claim 22, wherein said polyanion is poly(styrenesulfonate).

24. (Currently Amended) The process according to claim 20 [[17]], wherein said aqueous fountain medium further contains a di- or polyhydroxy- and/or carboxy groups or amide or lactam group containing organic compound.

25. (Previously Presented) The process according to claim 24, wherein said di- or polyhydroxy- and/or carboxy groups or amide or lactam group containing organic compound is selected from the group consisting of 1,2-propandiol, propylene glycol, diethylene glycol, N-methyl pyrrolidinone and di(ethylene glycol)ethyl ether acetate.

26. (Previously Presented) The process according to claim 24, wherein said process further comprises heating said receiving medium within 10 minutes after printing to a temperature of 100 to 250°C.

27. (Currently Amended) A [[The]] process ~~according to claim 17,~~ for the offset printing of a receiving medium with a functional pattern comprising in any order the steps of: applying a printing ink to a printing plate and wetting said printing plate with a fountain comprising a fountain medium comprising between 50% by weight and 100% by weight of water thereby providing said printing plate with an area inked with said printing ink and an

area coated with said fountain, and transferring said printing ink and fountain onto said receiving medium, wherein said fountain further comprises as a solution or a dispersion in said fountain medium at least one moiety having at least pH-indicating, whitening, fluorescent, phosphorescent, X-ray phosphor, organic conductive or organo-metallic conductive properties, wherein a functional pattern of at least one moiety is provided on said receiving medium, [and] wherein a pH-indicator pattern is provided when said fountain comprises at least one moiety having at least pH-indicator properties, and wherein said aqueous fountain medium further contains an aprotic organic compound with a dielectric constant ≥ 15.

28. (Previously Presented) The process according to claim 27, wherein said process further comprises heating said receiving medium within 10 minutes after printing to a temperature of ≤ 150°C.

29. (Currently Amended) The process according to claim 20 [[17]], wherein said fountain further comprises a non-ionic or anionic surfactant.

30. (Currently Amended) The process according to claim 20 [[17]], wherein said fountain has a viscosity at 25°C after stirring to constant viscosity of 30 mPa.s as measured according to DIN 53211.

31. (Canceled).

32. (Currently Amended) The process according to claim 40 [[31]], wherein said intrinsically conductive polymer is selected from the group consisting of polyanilines, polyaniline derivatives, polypyrroles, polypyrrole derivatives, polythiophenes and polythiophene derivatives.

33. (Currently Amended) A [[The]] process ~~according to claim 31,~~ for the offset printing of a receiving medium with a functional pattern comprising in any order the steps of: applying a printing ink to a printing plate and wetting said printing plate with a fountain comprising a fountain medium which comprises water, said fountain further comprising as a solution or dispersion in said fountain medium at least one moiety which is an intrinsically

conductive polymer, wherein a functional pattern of said intrinsically conductive polymer is provided on said receiving material when said fountain is transferred to said receiving medium, and wherein said intrinsically conductive polymer is a polymer or copolymer of a 3,4-dialkoxythiophene in which the two alkoxy groups may be the same or different or together represent an optionally substituted oxy-alkylene-oxy bridge.

34. (Currently Amended) The process according to claim 33 [[31]], wherein said intrinsically conductive polymer is selected from the group consisting of: homopolymers of (3,4-methylenedioxy-thiophene), (3,4-methylenedioxythiophene) derivatives, (3,4-ethylenedioxythiophene), (3,4-ethylenedioxythiophene) derivatives, (3,4-propylenedioxythiophene), (3,4-(propylenedioxythiophene) derivatives, (3,4-butylenedioxythiophene) and (3,4-butylenedioxythiophene) derivatives and copolymers thereof.

35. (Currently Amended) The process according to claim 33 [[31]], wherein said aqueous fountain medium further comprises a polyanion.

36. (Previously Presented) The process according to claim 35, wherein said polyanion is poly(styrenesulfonate).

37. (Currently Amended) The process according to claim 33 [[31]], wherein said aqueous fountain medium further comprises a di- or polyhydroxy- and/or carboxy groups or amide or lactam group containing organic compound.

38. (Previously Presented) The process according to claim 37, wherein said di- or polyhydroxy- and/or carboxy groups or amide or lactam group containing organic compound is selected from the group consisting of 1,2-propandiol, propylene glycol, diethylene glycol, N-methyl pyrrolidinone and di(ethylene glycol)ethyl ether acetate.

39. (Previously Presented) The process according to claim 37, wherein said process further comprises heating said receiving medium within 10 minutes after printing to a temperature of 100 to 250°C.

40. (Currently Amended) A [[The]] process ~~according to claim 31,~~ for the offset printing of a receiving medium with a functional pattern comprising in any order the steps of:

applying a printing ink to a printing plate and wetting said printing plate with a fountain comprising a fountain medium which comprises water, said fountain further comprising as a solution or dispersion in said fountain medium at least one moiety which is an intrinsically conductive polymer, wherein a functional pattern of said intrinsically conductive polymer is provided on said receiving material when said fountain is transferred to said receiving medium, and wherein said aqueous fountain medium further contains an aprotic organic compound with a dielectric constant ≥ 15.

41. (Currently Amended) The process according to claim [[31]] 40, wherein said process further comprises heating said receiving medium within 10 minutes after printing to a temperature of ≤ 150°C.

42. (Currently Amended) The process according to claim 33 [[31]], wherein said fountain further comprises a non-ionic or anionic surfactant.

43. (Currently Amended) The process according to claim 33 [[31]], wherein said fountain has a viscosity at 25°C after stirring to constant viscosity of 30 mPa.s as measured according to DIN 53211.

Claims 44-47. (Canceled).

48. (Currently Amended) The process according to claim 58 [[47]], wherein the fountain comprises at least one moiety having at least polymeric intrinsically conductive properties as a solution or dispersion in said fountain medium.

49. (Currently Amended) The process according to claim 58 [[47]], wherein said moiety having at least having at least polymeric intrinsically conductive properties is an intrinsically conductive polymer.

50. (Previously Presented) The process according to claim 49, wherein said intrinsically conductive polymer is selected from the group consisting of polyanilines, polyaniline derivatives, polypyrroles, polypyrrole derivatives, polythiophenes and polythiophene derivatives.

51. (Currently Amended) A (The) process [according to claim 49,] for the offset

printing of a receiving medium with a functional pattern comprising in any order the steps of: applying a printing ink to a printing plate and wetting said printing plate with a fountain comprising a fountain medium comprising between 50% by weight and 100% by weight of water and at least one moiety having at least polymeric intrinsically conductive properties thereby providing said printing plate with an area inked with said printing ink and an area coated with said fountain, and transferring said printing ink and fountain onto said receiving medium, wherein a functional pattern of said at least one moiety is provided on said receiving medium, wherein said moiety having at least polymeric intrinsically conductive properties is an intrinsically conductive polymer, and wherein said intrinsically conductive polymer is a polymer or copolymer of a 3,4-dialkoxythiophene in which the two alkoxy groups may be the same or different or together represent an optionally substituted oxy-alkylene-oxy bridge.

52. (Currently Amended) The process according to claim 51 [[49]], wherein said intrinsically conductive polymer is selected from the group consisting of: homopolymers of (3,4-methylenedioxy-thiophene), (3,4-methylenedioxythiophene) derivatives, (3,4-ethylenedioxythiophene), (3,4-ethylenedioxythiophene) derivatives, (3,4-propylenedioxythiophene), (3,4-(propylenedioxythiophene) derivatives, (3,4-butylenedioxythiophene) and (3,4-butylenedioxythiophene) derivatives and copolymers thereof.

53. (Currently Amended) The process according to claim 51 [[47]], wherein said aqueous fountain medium further comprises a polyanion.

54. (Previously Presented) The process according to claim 53, wherein said polyanion is poly(styrenesulfonate).

55. (Currently Amended) The process according to claim 51 [[47]], wherein said aqueous fountain medium further comprises a di- or polyhydroxy- and/or carboxy groups or amide or lactam group containing organic compound.

56. (Previously Presented) The process according to claim 55, wherein said di- or polyhydroxy- and/or carboxy groups or amide or lactam group containing organic compound is selected from the group consisting of 1,2-propandiol, propylene glycol, diethylene glycol, N-methyl pyrrolidinone and di(ethylene glycol)ethyl ether acetate.

57. (Currently Amended) The process according to claim 55 [[47]], wherein said process further comprises heating said receiving medium within 10 minutes after printing to a temperature of 100°C to 250°C.

58. (Currently Amended) A [[The]] process ~~according to claim 49,~~ for the offset printing of a receiving medium with a functional pattern comprising in any order the steps of: applying a printing ink to a printing plate and wetting said printing plate with a fountain comprising a fountain medium comprising between 50% by weight and 100% by weight of water and at least one moiety having at least polymeric intrinsically conductive properties thereby providing said printing plate with an area inked with said printing ink and an area coated with said fountain, and transferring said printing ink and fountain onto said receiving medium, wherein a functional pattern of said at least one moiety is provided on said receiving medium, and wherein said aqueous fountain medium further contains an aprotic organic compound with a dielectric constant ≥ 15.

59. (Previously Presented) The process according to claim 47, wherein said process further comprises heating said receiving medium within 10 minutes after printing to a temperature of ≤ 150°C.

60. (Currently Amended) The process according to claim 51 [[47]], wherein said fountain further comprises a non-ionic or anionic surfactant.

61. (Currently Amended) The process according to claim 51 [[47]], wherein said fountain has a viscosity at 25°C after stirring to constant viscosity of 30 mPa.s as measured according to DIN 53211.

62. (New) The process according to claim 2, wherein said intrinsically conductive polymer is selected from the group consisting of polyanilines, polyaniline derivatives, polypyrroles, polypyrrole derivatives, polythiophenes and polythiophene derivatives.

63. (New) The process according to claim 62, wherein said intrinsically conductive polymer is a polymer or copolymer of a 3,4-dialkoxythiophene in which the two alkoxy groups may be the same or different or together represent an optionally substituted oxy-alkylene-oxy bridge.

64. (New) The process according to claim 62, wherein said intrinsically conductive polymer is selected from the group consisting of: homopolymers of (3,4-methylenedioxy-thiophene), (3,4-methylenedioxythiophene) derivatives, (3,4-ethylenedioxy-thiophene), (3,4-ethylenedioxythiophene) derivatives, (3,4-propylenedioxythiophene), (3,4-(propylenedioxythiophene) derivatives, (3,4-butylenedioxythiophene) and (3,4-butylenedioxythiophene) derivatives and copolymers thereof.

65. (New) The process according to claim 11, wherein said aqueous fountain medium further comprises a polyanion.

66. (New) The process according to claim 65, wherein said polyanion is poly(styrenesulfonate).

67. (New) The process according to claim 11, wherein said aqueous fountain medium further contains a di- or polyhydroxy- and/or carboxy groups or amide or lactam group containing organic compound.

68. (New) The process according to claim 67, wherein said di- or polyhydroxy- and/or carboxy groups or amide or lactam group containing organic compound is selected from the group consisting of 1,2-propandiol, propylene glycol, diethylene glycol, N-methyl pyrrolidinone and di(ethylene glycol)ethyl ether acetate.

69. (New) The process according to claim 67, wherein said process further comprises heating said receiving medium within 10 minutes after printing to a temperature of 100°C to 250°C.

70. (New) The process according to claim 11, wherein said fountain further comprises a non-ionic or anionic surfactant.

71. (New) The process according to claim 11, wherein said fountain has a viscosity at 25°C after stirring to constant viscosity of 30 mPa.s as measured according to DIN 53211.

72. (New) The process according to claim 27, wherein said intrinsically conductive polymer is a polymer or copolymer of a 3,4-dialkoxythiophene in which the two

alkoxy groups may be the same or different or together represent an optionally substituted oxy-alkylene-oxy bridge.

73. (New) The process according to claim 27, wherein said intrinsically conductive polymer is selected from the group consisting of: homopolymers of (3,4-methylenedioxy-thiophene), (3,4-methylenedioxythiophene) derivatives, (3,4-ethylenedioxy-thiophene), (3,4-ethylenedioxythiophene) derivatives, (3,4-propylenedioxythiophene), (3,4-(propylenedioxythiophene) derivatives, (3,4-butylenedioxythiophene) and (3,4-butylene-dioxythiophene) derivatives and copolymers thereof.

74. (New) The process according to claim 27, wherein said aqueous fountain medium further comprises a polyanion.

75. (New) The process according to claim 74, wherein said polyanion is poly(styrenesulfonate).

76. (New) The process according to claim 27, wherein said aqueous fountain medium further contains a di- or polyhydroxy- and/or carboxy groups or amide or lactam group containing organic compound.

77. (New) The process according to claim 76, wherein said di- or polyhydroxy-and/or carboxy groups or amide or lactam group containing organic compound is selected from the group consisting of 1,2-propandiol, propylene glycol, diethylene glycol, N-methyl pyrrolidinone and di(ethylene glycol)ethyl ether acetate.

78. (New) The process according to claim 76, wherein said process further comprises heating said receiving medium within 10 minutes after printing to a temperature of 100 to 250°C.

79. (New) The process according to claim 27, wherein said fountain further comprises a non-ionic or anionic surfactant.

80. (New) The process according to claim 27, wherein said fountain has a viscosity at 25°C after stirring to constant viscosity of 30 mPa.s as measured according to DIN 53211.

81. (New) The process according to claim 40, wherein said intrinsically conductive polymer is a polymer or copolymer of a 3,4-dialkoxythiophene in which the two alkoxy groups may be the same or different or together represent an optionally substituted oxy-alkylene-oxy bridge.

82. (New) The process according to claim 40, wherein said intrinsically conductive polymer is selected from the group consisting of: homopolymers of (3,4-methylenedioxy-thiophene), (3,4-methylenedioxythiophene) derivatives, (3,4-ethylenedioxy-thiophene), (3,4-ethylenedioxythiophene) derivatives, (3,4-propylenedioxythiophene), (3,4-(propylenedioxythiophene) derivatives, (3,4-butylenedioxythiophene) and (3,4-butylenedioxythiophene) derivatives and copolymers thereof.

83. (New) The process according to claim 40, wherein said aqueous fountain medium further comprises a polyanion.

84. (New) The process according to claim 83, wherein said polyanion is poly(styrenesulfonate).

85. (New) The process according to claim 40, wherein said aqueous fountain medium further contains a di- or polyhydroxy- and/or carboxy groups or amide or lactam group containing organic compound.

86. (New) The process according to claim 85, wherein said di- or polyhydroxy- and/or carboxy groups or amide or lactam group containing organic compound is selected from the group consisting of 1,2-propandiol, propylene glycol, diethylene glycol, N-methyl pyrrolidinone and di(ethylene glycol)ethyl ether acetate.

87. (New) The process according to claim 85, wherein said process further comprises heating said receiving medium within 10 minutes after printing to a temperature of 100 to 250°C.

88. (New) The process according to claim 40, wherein said fountain further comprises a non-ionic or anionic surfactant.

89. (New) The process according to claim 40, wherein said fountain has a viscosity at 25°C after stirring to constant viscosity of 30 mPa.s as measured according to DIN 53211.

90. (New) The process according to claim 49, wherein said intrinsically conductive polymer is a polymer or copolymer of a 3,4-dialkoxythiophene in which the two alkoxy groups may be the same or different or together represent an optionally substituted oxy-alkylene-oxy bridge.

91. (New) The process according to claim 49, wherein said intrinsically conductive polymer is selected from the group consisting of: homopolymers of (3,4-methylenedioxy-thiophene), (3,4-methylenedioxythiophene) derivatives, (3,4-ethylenedioxy-thiophene), (3,4-ethylenedioxythiophene) derivatives, (3,4-propylenedioxythiophene), (3,4-(propylenedioxythiophene) derivatives, (3,4-butylenedioxythiophene) and (3,4-butylenedioxythiophene) derivatives and copolymers thereof.

92. (New) The process according to claim 58, wherein said aqueous fountain medium further comprises a polyanion.

93. (New) The process according to claim 92, wherein said polyanion is poly(styrenesulfonate).

94. (New) The process according to claim 58, wherein said aqueous fountain medium further contains a di- or polyhydroxy- and/or carboxy groups or amide or lactam group containing organic compound.

95. (New) The process according to claim 94, wherein said di- or polyhydroxy- and/or carboxy groups or amide or lactam group containing organic compound is selected from the group consisting of 1,2-propandiol, propylene glycol, diethylene glycol, N-methyl pyrrolidinone and di(ethylene glycol)ethyl ether acetate.

96. (New) The process according to claim 94, wherein said process further comprises heating said receiving medium within 10 minutes after printing to a temperature of 100°C to 250°C.

97. (New) The process according to claim 58, wherein said fountain further comprises a non-ionic or anionic surfactant.

98. (New) The process according to claim 58, wherein said fountain has a viscosity at 25°C after stirring to constant viscosity of 30 mPa.s as measured according to DIN 53211.

This listing of claims replaces all prior versions, and listings, of claims in the application.